

July 20, 2018

Mr. Matt Armstrong Environmental Specialist IV Williams – Operational Excellence West Environmental Services 295 Chipeta Way Salt Lake City, UT 84108

RE: NSPS KKK, OOOO, and OOOOa Leak Detection and Repair (LDAR) Monitoring Report – Ignacio Gas Plant, Williams Four Corners, LLC, Ignacio, Colorado

Dear Mr. Armstrong:

During January 1, 2018 through June 30, 2018, Trihydro Corporation (Trihydro) completed routine monthly monitoring for fugitive emissions as required by the Leak Detection and Repair (LDAR) program for the Williams Four Corners (Williams) Ignacio Gas Plant located near Ignacio, Colorado. The monitoring activities were completed to satisfy the requirements of the New Source Performance Standards (NSPS) Subpart KKK, Subpart OOOO, and Subpart OOOOa regulations. This report serves as the semiannual report required for submittal to the regulatory agencies.

#### **NSPS Subpart KKK Requirements**

Subpart KKK requires that a semiannual report be submitted for each process unit and month within the reporting period. The semiannual report must include:

- The number of valves, pressure-relief devices (PRDs), pumps, and compressors for which leaks were detected.
- The number of valves, PRDs, pumps, and compressors for which leaks were not repaired as required or placed on the delay of repair (DOR) list.
- The facility is required to report the reason for each DOR, the dates of process unit shutdowns that occurred within the reporting period and revisions to the component inventory.

#### **Subpart KKK Results**

In accordance with USEPA Method 21 protocol, Trihydro personnel monitored components in volatile organic compound (VOC) service or in wet gas service. During the 6-month reporting period 11 leaks were detected from the components monitored. Repairs were completed on each of the components identified as leaking and received a passing inspection within the 15-day deadline. The number of valves,



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pumps, pressure-relief devices, and compressors for which leaks were detected during the reporting period are included in Attachment A.

During the reporting period, 15 components were added to and 18 components were removed from the Subpart KKK inventory. The revisions made to the component inventory are provided in Attachment A.

#### NSPS Subpart OOOO and Subpart OOOOa Requirements

Subpart OOOO and Subpart OOOOa requires that a semiannual report be submitted for each process unit and month within the reporting period. The semiannual report must include:

- The number of valves, PRDs, pumps, compressors, and connectors for which leaks were detected.
- The number of valves, PRDs, pumps, compressors, and connectors for which leaks were not repaired as required or placed on the DOR list.
- The facility is required to report the reason for each DOR, the dates of process unit shutdowns that occurred within the reporting period and revisions to the component inventory.

#### Subpart 0000 and 0000a Results

In accordance with United States EPA Method 21 protocol, Trihydro personnel monitored components in VOC service or in wet gas service. During the 6-month reporting period 16 leaks were detected from the components monitored. Repairs were completed on each of the components identified as leaking and received a passing inspection within the 15-day deadline. The number of valves, pumps, PRDs, compressors, and connectors for which leaks were detected during the reporting period are presented in Attachment B and Attachment C.

There were 5 components added to and 11 components removed from the initial Subpart OOOO inventory during the reporting period and is reported in Attachment B. There were no revisions made to component Subpart OOOOa component inventory during the reporting period and is reported in Attachment C.

The facility had one shutdown lasting longer than 24 hours during the reporting period. The shutdown occurred from April 3, 2018 through April 12, 2018.



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If you have any questions and/or comments about this report, please do not hesitate to call us at (307) 745-7474.

Brian Palmer

Group Manager - LDAR Field Services

Sincerely,

Trihydro Corporation

Calvin Niss

Vice President

12Z-012-006

Attachments

# ATTACHMENT A NSPS KKK REPORT DATA



From: 1/1/2018 To: 6/30/2018, Rule: NSPS - KKK

Williams Midstream - Ignacio

Unit: Storage and Loading

| # Components:            | Valves   | : 868                             | Pumps    | : 13                              | Compress | sors: 0                           | PI       | RVs: 39                           |
|--------------------------|----------|-----------------------------------|----------|-----------------------------------|----------|-----------------------------------|----------|-----------------------------------|
| # Added:<br># Perm. OOS: |          | 0<br>0                            |          | 0<br>0                            |          | 0<br>0                            |          | 0<br>0                            |
| Month:                   | Leaking: | Not Repaired in<br>Repair Period: |
| January 2018             | 4        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 |
| February 2018            | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 |
| March 2018               | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 |
| April 2018               | 3        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 |
| May 2018                 | 1        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 |
| June 2018                | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 |

| 118               | 3                              | 0 | 0  | 0            | 0 | 0 | 0 |  |  |  |  |  |  |
|-------------------|--------------------------------|---|----|--------------|---|---|---|--|--|--|--|--|--|
| 18                | 1                              | 0 | 0  | 0            | 0 | 0 | 0 |  |  |  |  |  |  |
| 018               | 0                              | 0 | 0  | 0            | 0 | 0 | 0 |  |  |  |  |  |  |
| Delay of Repairs: |                                |   |    |              |   |   |   |  |  |  |  |  |  |
|                   | No Delay of Repairs Performed. |   |    |              |   |   |   |  |  |  |  |  |  |
| Late Rep          | Late Repairs:                  |   |    |              |   |   |   |  |  |  |  |  |  |
|                   |                                |   | No | Late Repairs |   |   |   |  |  |  |  |  |  |
|                   |                                |   |    |              |   |   |   |  |  |  |  |  |  |
|                   |                                |   |    |              |   |   |   |  |  |  |  |  |  |
| Signature:        |                                |   |    |              |   |   |   |  |  |  |  |  |  |



From: 1/1/2018 To: 6/30/2018, Rule: NSPS - KKK

Williams Midstream - Ignacio

Unit: TXP

| # Components:            | Valves   | : 682                          | Pumps    | : 8                               | Compress | sors: 0                        | PI       | RVs: 5                         |
|--------------------------|----------|--------------------------------|----------|-----------------------------------|----------|--------------------------------|----------|--------------------------------|
| # Added:<br># Perm. OOS: |          | 15<br>16                       |          | 0<br>1                            |          | 0<br>0                         |          | 0<br>1                         |
| Month:                   | Leaking: | Not Repaired in Repair Period: | Leaking: | Not Repaired in<br>Repair Period: | Leaking: | Not Repaired in Repair Period: | Leaking: | Not Repaired in Repair Period: |
| January 2018             | 0        | 0                              | 0        | 0                                 | 0        | 0                              | 0        | 0                              |
| February 2018            | 0        | 0                              | 0        | 0                                 | 0        | 0                              | 0        | 0                              |
| March 2018               | 3        | 0                              | 0        | 0                                 | 0        | 0                              | 0        | 0                              |
| April 2018               | 0        | 0                              | 0        | 0                                 | 0        | 0                              | 0        | 0                              |
| May 2018                 | 0        | 0                              | 0        | 0                                 | 0        | 0                              | 0        | 0                              |
| June 2018                | 0        | 0                              | 0        | 0                                 | 0        | 0                              | 0        | 0                              |

|                                | 4          |   |    |              |   |   |   |  |  |  |  |  |
|--------------------------------|------------|---|----|--------------|---|---|---|--|--|--|--|--|
| )18                            | 0          | 0 | 0  | 0            | 0 | 0 | 0 |  |  |  |  |  |
| 18                             | 0          | 0 | 0  | 0            | 0 | 0 | 0 |  |  |  |  |  |
| 018                            | 0          | 0 | 0  | 0            | 0 | 0 | 0 |  |  |  |  |  |
| Delay of Repairs:              |            |   |    |              |   |   |   |  |  |  |  |  |
| No Delay of Repairs Performed. |            |   |    |              |   |   |   |  |  |  |  |  |
| Late Rep                       | pairs:     |   |    |              |   |   |   |  |  |  |  |  |
|                                |            |   | No | Late Repairs |   |   |   |  |  |  |  |  |
|                                |            |   |    |              |   |   |   |  |  |  |  |  |
|                                |            |   |    |              |   |   |   |  |  |  |  |  |
| Signatur                       | Signature: |   |    |              |   |   |   |  |  |  |  |  |

# ATTACHMENT B NSPS OOOO REPORT DATA



From: 1/1/2018 To: 6/30/2018, Rule: NSPS - OOOO

Williams Midstream - Ignacio

Unit: INLET

| Count:     | Valve    | s: 958                            | Pump     | s: 5                              | Compres  | ssors: 3                          | PRV      | s: 22                             | Connec   | tors: 6862                     |
|------------|----------|-----------------------------------|----------|-----------------------------------|----------|-----------------------------------|----------|-----------------------------------|----------|--------------------------------|
| # Added:   |          | 1                                 |          | 0                                 |          | 0                                 |          | 0                                 |          | 4                              |
| # Removed: |          | 0                                 |          | 0                                 |          | 0                                 |          | 0                                 |          | 11                             |
| Month:     | Leaking: | Not Repaired in<br>Repair Period: | Leaking: | Not Repaired in Repair Period: |
| Jan 2018   | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |
| Feb 2018   | 1        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |
| Mar 2018   | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |
| Apr 2018   | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |
| May 2018   | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 3        | 0                              |
| Jun 2018   | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 1        | 0                                 | 3        | 0                              |

| 0  | U          | U       | U | U           | 0         | U             | U | U | U |  |
|----|------------|---------|---|-------------|-----------|---------------|---|---|---|--|
| 8  | 0          | 0       | 0 | 0           | 0         | 0             | 0 | 0 | 0 |  |
| 18 | 0          | 0       | 0 | 0           | 0         | 0             | 0 | 0 | 3 |  |
| 8  | 0          | 0       | 0 | 0           | 0         | 0             | 1 | 0 | 3 |  |
| De | elay of Re | epairs: |   |             |           |               |   |   |   |  |
|    |            |         |   | No Delav c  | of Repair | s Performed   | _ |   |   |  |
|    |            |         | • | ito Dolay c | , rtopun  | 01 0110111104 | • |   |   |  |
| La | te Repai   | rs:     |   |             |           |               |   |   |   |  |
|    |            |         |   | No          | Late Re   | pairs.        |   |   |   |  |
|    |            |         |   |             |           |               |   |   |   |  |
|    |            |         |   |             |           |               |   |   |   |  |
|    |            |         |   |             |           |               |   |   |   |  |
| Si | gnature:   |         |   |             |           |               |   |   |   |  |

# ATTACHMENT C NSPS OOOOa REPORT DATA



From: 1/1/2018 To: 6/30/2018, Rule: NSPS - OOOOa

Williams Midstream - Ignacio

Unit: Amine Treatment

| Count:     | Valve    | s: 403                            | Pump     | s: 0                              | Compres  | ssors: 0                          | PRV      | s: 12                             | Connec   | tors: 1442                     |
|------------|----------|-----------------------------------|----------|-----------------------------------|----------|-----------------------------------|----------|-----------------------------------|----------|--------------------------------|
| # Added:   |          | 0                                 |          | 0                                 |          | 0                                 |          | 0                                 |          | 0                              |
| # Removed: |          | 0                                 |          | 0                                 |          | 0                                 |          | 0                                 |          | 0                              |
| Month:     | Leaking: | Not Repaired in<br>Repair Period: | Leaking: | Not Repaired in Repair Period: |
| Jan 2018   | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |
| Feb 2018   | 2        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |
| Mar 2018   | 1        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |
| Apr 2018   | 1        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |
| May 2018   | 1        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |
| Jun 2018   | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |

| 010 | 1         | U        | ' | 0           | U       | 0             | 0 | U | V | i                                       |
|-----|-----------|----------|---|-------------|---------|---------------|---|---|---|---|
| 018 | 1         | 0        | 0 | 0           | 0       | 0             | 0 | 0 | 0 |   |
| 018 | 1         | 0        | 0 | 0           | 0       | 0             | 0 | 0 | 0 |   |
| 018 | 0         | 0        | 0 | 0           | 0       | 0             | 0 | 0 | 0 |   |
| D   | elay of F | Repairs: |   |             |         |               |   |   |   |   |
|     |           |          |   | No Delay of | f Repai | rs Performed. |   |   |   |   |
| L   | ate Repa  | nirs:    |   |             |         |               |   |   |   | *************************************** |
|     |           |          |   | No I        | Late Re | pairs.        |   |   |   |   |
|     |           |          |   |             |         |               |   |   |   |   |
|     |           |          |   |             |         |               |   |   |   |   |
| S   | ignature  | :        |   |             |         |               |   |   |   |   |
|     |           |          |   |             |         |               |   |   |   |   |



From: 1/1/2018 To: 6/30/2018, Rule: NSPS - OOOOa

Williams Midstream - Ignacio

Unit: Dehy/Molesieve

| Count:     | Valve    | s: 235                            | Pump     | s: 1                              | Compres  | ssors: 0                          | PRV      | s: 10                             | Connec   | ctors: 917                     |
|------------|----------|-----------------------------------|----------|-----------------------------------|----------|-----------------------------------|----------|-----------------------------------|----------|--------------------------------|
| # Added:   |          | 0                                 |          | 0                                 |          | 0                                 |          | 0                                 |          | 0                              |
| # Removed: |          | 0                                 |          | 0                                 |          | 0                                 |          | 0                                 |          | 0                              |
| Month:     | Leaking: | Not Repaired in<br>Repair Period: | Leaking: | Not Repaired in Repair Period: |
| Jan 2018   | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |
| Feb 2018   | 3        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |
| Mar 2018   | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |
| Apr 2018   | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |
| May 2018   | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |
| Jun 2018   | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                                 | 0        | 0                              |

| 18 | 0                              | 0     | 0 | 0    | 0       | 0       | 0 | 0 | 0 |  |  |  |
|----|--------------------------------|-------|---|------|---------|---------|---|---|---|--|--|--|
| 18 | 0                              | 0     | 0 | 0    | 0       | 0       | 0 | 0 | 0 |  |  |  |
| 18 | 8 0 0 0 0 0 0 0 0              |       |   |      |         |         |   |   |   |  |  |  |
| D  | Delay of Repairs:              |       |   |      |         |         |   |   |   |  |  |  |
|    | No Delay of Repairs Performed. |       |   |      |         |         |   |   |   |  |  |  |
| L  | ate Repa                       | iirs: |   |      |         |         |   |   |   |  |  |  |
|    |                                |       |   | No l | ₋ate R∈ | epairs. |   |   |   |  |  |  |
|    |                                |       |   |      |         |         |   |   |   |  |  |  |
| s  | ignature                       | :     |   |      |         |         |   |   |   |  |  |  |